

ABSTRACT

In a semiconductor integrated circuit of the present invention, the main circuit 2 includes MOS transistors in which the source and the substrate are separated from each other. The substrate potential control circuit 1 controls the substrate potential of the MOS transistors of the main circuit 2 so that the actual saturation current value of the MOS transistors of the main circuit 2 is equal to the target saturation current value I_{ds} under the operating power supply voltage V_{dd} of the main circuit 2. Therefore, it is possible to suppress variations in the operation speed even if the operating power supply voltage of the semiconductor integrated circuit is reduced.